

REMARKS

This is a full and timely response to the outstanding non-final Office Action mailed August 26, 2004. Reconsideration and allowance of the application and pending claims are respectfully requested.

I. Specification Objections

The specification has been objected to for containing various informalities. In response to the objection, Applicant has amended the specification to correct those informalities. It is respectfully asserted that no new matter has been added. Applicant respectfully submits that the specification is not objectionable, and therefore respectfully requests that the objection be withdrawn.

II. Claim Objections

Claim 17 has been objected under 37 CFR §1.75(a) for failing to particularly point out and distinctly claim the subject matter which the applicant regards as his invention or discovery.

In response to the objection, Applicant has amended claim 17 to provide proper antecedent basis. In view of that amendment, Applicant respectfully submits that claim 17 is not objectionable and respectfully requests that the objection be withdrawn.

III. Claim Rejections - 35 U.S.C. § 102(b)

Claims 1-20 have been rejected under 35 U.S.C. § 102(b) as being anticipated by Shaffer, et al. ("Shaffer," U.S. Pat. No. 6,389,181). Applicant respectfully traverses this rejection.

As a first matter, Applicant notes that the Shaffer reference was published after Applicant's filing date. As such, the Shaffer reference does not qualify as prior art under 35 U.S.C. § 102(b). Applicant assumes for the purposes of this Response that the rejection is made under 35 U.S.C. § 102(e).

It is axiomatic that "[a]nticipation requires the disclosure in a single prior art reference of each element of the claim under consideration." W. L. Gore & Associates, Inc. v. Garlock, Inc., 721 F.2d 1540, 1554, 220 U.S.P.Q. 303, 313 (Fed. Cir. 1983)(emphasis added). Therefore, every claimed feature of the claimed invention must be represented in the applied reference to constitute a proper rejection under 35 U.S.C. § 102.

In the present case, Applicant has amended each independent claim. In view of those amendments, the rejection is moot as having been drawn against Applicant's claims in a previous form. Applicant discusses the Shaffer reference and Applicant's claim in the following, however, for the Examiner's consideration.

Shaffer discloses a photocollage generation system and method. As is summarized by Shaffer:

The present invention addresses the need for an improved method of *generating photo albums from consumer photographs* that requires a minimum amount of effort but yields a high-quality product and is reasonably priced.

The present invention is directed to overcoming one or more of the problems set forth above. Briefly summarized, according to one aspect of the present invention, a ***system and method for producing a photocollage from a plurality of images***, comprising the steps of: a) obtaining a digital record for each of the plurality of images, each of the digital records having a unique identifier and storing the digital records in a database; b) automatically sorting the digital records using at least one date type to categorize each of the digital records according to at least one predetermined criteria; c) employing means responsive to the sorting step to compose a photocollage from the digital records. ***The system then associates each of the images with at least one of the categories followed by a sorting step that arranges the images according to the categories. The system then employs the categories to automatically construct the photocollage from the stored images by generating a plurality of pages of the stored images.*** (Shaffer, column 2, lines 33-54)

From the above excerpt, it is clear that Shaffer describes a system and method for automatically creating “photocollages” from customer images.

Contrary to the Shaffer disclosure, Applicant’s claimed inventions do not create photocollages. Because of that fact, there are many distinctions between Shaffer’s systems and methods and Applicant’s claimed inventions. Applicant addresses these distinctions in the following discussions.

A. **Claims 4-6**

Referring first to independent claim 4, Applicant claims (emphasis added):

4. ***An image file*** embodied in a computer-readable medium, comprising:

digital image data that represents an image; and

image meta-data associated with the digital image data ***created by applying a predefined image analysis algorithm to the digital image data to identify content within the image.***

As an initial matter, Applicant notes that Shaffer does not teach or suggest an “image file” that comprises image data *and* meta-data. Instead, Shaffer only describes meta-data 34 stored on image store 20 that is *associated with* the image data (“pixel data 32”). Shaffer, column 4, lines 15-17; Figure 2. Accordingly, Shaffer fails to anticipate an image file that comprises both such attributes.

Second, Applicant notes that Shaffer does not teach or suggest meta-data that was “created by applying a predefined image analysis algorithm to the digital image data to identify content within the image” as is further required by claim 4. The process in which meta-data is created in the Shaffer system and method is described in detail in columns 3 and 4 of the Shaffer reference. As is stated by Shaffer in those columns:

As shown in FIG. 2, the collection step begins when a customer, having completed picture taking for one or more events delivers one or more exposed film strips or cartridges 10, digital still camera memory cards 12, photographic prints 6 or video camera media 8 to a processing facility 14. At the time that the customer delivers the exposed film cartridge(s) to the processing facility the customer's identity is recorded and associated with the suite of film cartridges and other image sources. . . . At the conclusion of this step in the process

there exists a collection of digital image files associated with a customer by means of a customer identification. This collection of digital image data, or pixel data 32, is now available as a source of data for the Story Services processing modules. ***Data attached or associated with individual images or groups of images provided by the customer*** such as date, time, location, sound, camera identification, customer identification, exposure parameters, Advanced Photo System IX data, ***are all examples of meta-data***. This meta-data 34 is stored on image store 20 and associated with the available pixel data 32. In addition the customer selects the desired output product or product type from a listing of available choices. This selection may be indicated by the customer marking the photo processing bag 24, verbally indicating the desired product to a clerk or by input at a computer terminal or kiosk 28. The order description 36 generated from any one of the indicated sources provided by the customer is stored on the system and is associated, by means of a customer identification, with an existing customer profile 30 in the data store 20.

As is apparent from the above excerpt, Shaffer's "meta-data" is not created by applying a predefined image analysis algorithm to the digital image data to identify content within the image, but instead is "provided by the customer." Although Shaffer describes algorithms that identify objects in images, those algorithms are *not* used to generate Shaffer's meta-data, but instead are only used in the "grouping step" and the "annotation step" described in columns 7 and 8.

Claim 4 and its dependent claims are allowable over Shaffer for at least the above-described reasons.

B. Claims 7-12

Referring next to independent claim 7, Applicant claims (emphasis added):

7. An *image capture device*, comprising:
image capture hardware configured to capture an image; and
logic configured for:
generating a digital representation of the image, the digital representation comprising image data;
applying at least one predefined image analysis algorithm to the digital representation of the image to identify content within the image, the at least one predefined image analysis algorithm generating image meta-data corresponding to the image content; and
combining the image meta-data corresponding to the image content *with the image data* to define *new image data*.

Regarding claim 7, Shaffer does not teach or suggest an “image capture device” (i.e., a device comprising “image capture hardware”) that includes logic configured for applying a predefined image analysis algorithm. As is identified above in relation to claim 4, Shaffer instead discloses collecting images from a customer by receiving a roll of film (or memory card), and then conducting various processing on the data contained therein. Accordingly, the image capture devices described by Shaffer (i.e., the customer cameras), comprise no image analysis algorithms.

As a further point, Applicant notes that Shaffer does not describe any algorithm, whether provided on an image capture device or any other device, that is applied to “identify content within the image . . . generating image meta-data corresponding to the image content”.

Moreover, Shaffer does not disclose an image capture device that combines image meta-data and image data to define “new image data”. As mentioned above, Shaffer stores pixel data 32 and meta-data 34 separately.

Claim 7 and its dependent claims are allowable over Shaffer for at least the above-described reasons.

C. Claims 13-15

Referring next to independent claim 13, Applicant claims (emphasis added):

13. A method for generating *an image file containing meta-data*, the method comprising:

identifying a digital representation of an image, the digital representation comprising image data;

applying at least one predefined image analysis algorithm to the digital representation of the image to identify content within the image, the at least one predefined image analysis algorithm generating meta-data corresponding to the image content; and

combining the meta-data corresponding to the image with the image content data to define new image data.

Regarding claim 13, Shaffer fails to teach or suggest any of “an image file containing meta-data”, “applying at least one predefined image analysis algorithm to the digital representation of the image to identify content within the image, the at least one predefined image analysis algorithm generating meta-data corresponding to the image content”, or “combining the meta-data corresponding to the image with the image content data to define new image data” for reasons discussed above in relation to claim 7. Claim 13 and its dependent claims are allowable over Shaffer for at least those reasons.

D. Claims 16-18

Referring next to independent claim 16, Applicant claims (emphasis added):

16. A method for searching image files having specific image meta-data, the method comprising:

receiving a search query comprising information related to specific image meta-data;

based on the search query, searching one or more image files for the image meta-data specified in the search query, the image meta-data having been generated by applying a predefined image analysis algorithm to the digital representation of the image to identify content within the image; and

identifying one or more of the image files that comprise image meta-data that matches the image meta-data specified in the search query.

Regarding claim 16, Shaffer fails to teach or suggest “receiving a search query” or “searching one or more image files for the image meta-data specified in the search query” as are required by claim 16. As is described in the foregoing, Shaffer describes a system and method for automatically generating photocollages, not for searching collections of images.

As a further matter, Applicant notes that Shaffer fails to teach or suggest “the image meta-data having been generated by applying a predefined image analysis algorithm to the digital representation of the image to identify content within the image” for reasons described above.

Claim 16 and its dependent claims are allowable over Shaffer for at least the above-described reasons.

E. Claims 19-20

Referring next to independent claim 19, Applicant claims (emphasis added):

19. A method for locating an image file, the method comprising:

providing a search query comprising information related to specific image meta-data; and

receiving one or more image files comprising image meta-data that matches the image meta-data specified in the search query, the image meta-data having been generated by applying a predefined image analysis algorithm to the digital representation of the image to identify content within the image.

Regarding claim 19, Shaffer fails to teach or suggest “providing a search query comprising information related to specific image meta-data” or “receiving one or more image files comprising image meta-data that matches the image meta-data specified in the search query” for reasons described above.

Furthermore, Shaffer fails to teach or suggest “image meta-data having been generated by applying a predefined image analysis algorithm to the digital representation of the image to identify content within the image” for reasons described in the foregoing.

Claim 19 and its dependent claims are allowable over Shaffer for at least the above-described reasons.

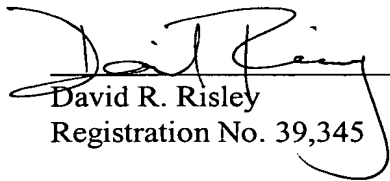
IV. Canceled Claims

As identified above, claims 1-3 have been canceled from the application through this Response without prejudice, waiver, or disclaimer. Applicant reserves the right to present these canceled claims, or variants thereof, in continuing applications to be filed subsequently.

CONCLUSION

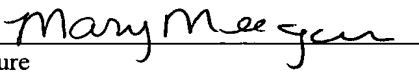
Applicant respectfully submits that Applicant's pending claims are in condition for allowance. Favorable reconsideration and allowance of the present application and all pending claims are hereby courteously requested. If, in the opinion of the Examiner, a telephonic conference would expedite the examination of this matter, the Examiner is invited to call the undersigned attorney at (770) 933-9500.

Respectfully submitted,


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